Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Preserving the Open Internet	)	GN Docket No. 09-191
	)	
Broadband Industry Practices	)	WC Docket No. 07-52
	)	
	)	

REPLY COMMENTS OF THE UTILITIES TELECOM COUNCIL

Pursuant to Section 1.405 of the Commission's Rules, UTC hereby files its reply comments in response to the Public Notice of the Petition for Clarification or Reconsideration of Southern Company Services, Inc. ("Petition") in the above-reference proceedings.[1] UTC supports the Petition because utilities need regulatory certainty that specialized services that they use for smart grid and other mission critical applications are reliable and that they will not be subject to network traffic delays that could result if the specialized services are subject to the Commission's Open Internet rules. In addition, providing this clarification will encourage broadband providers to offer such specialized services to utilities and other critical infrastructure industries, as more fully described below.

Introduction and Background

UTC is the international trade association for the telecommunications and information technology interests of electric, gas and water utilities and other critical infrastructure industries (CII). UTC's members include all types of utilities from large investor-owned utilities that serve millions of customers across multi-state service territories to relatively small rural cooperative utilities and municipal utilities that may only serve a few thousand customers in remote, insular and sparsely populated areas. These member companies all use communications to support their core mission of delivering essential services

[1] *See* Public Notice, Petition for Reconsideration of Action in Rulemaking Proceeding, WC Docket No. 07-52, GN Docket No. 09-191; Report No. 2936, 76 Fed. Reg. 74721 (Dec. 1, 2011) Petition for Clarification or Reconsideration of Southern Company Services, Inc, GN Docket No. 09-191 and WC Docket No. 07-52 (filed Oct. 24, 2011).

to the public safely, securely and efficiently. As such, UTC has advocated for policies that promote and protect utility communications, and it is pleased to offer its reply comments in this proceeding to provide the perspective of utilities and CII on the need for clarification that the Open Internet rules do not apply to specialized services for smart grid and other utility communications applications.

Because of the critical nature of the essential services that utilities and CII provide, the communications networks that support those core services are designed, built and maintained to high standards for reliability, coverage and resiliency. Utilities need communications that can withstand hurricanes, snow and ice storms, and that have adequate back-up power to remain operational for 72 hours or more in the event of a power outage. Utilities need reliable communications, particularly during emergencies. As such, utilities typically rely on their own private internal communications networks, particularly to support mission critical operations that affect the safety and reliability of their core services.

While utilities do use commercial service providers for some communications functions, these tend to be used for non-mission critical applications, certain point-to-point communications (e.g. a leased line to a remote substation) or enterprise communications. One of the main reasons that utilities limit their use of commercial services is reliability. Unfortunately, the commercial service providers are subject to network outages and congestion, particularly during emergencies, which can jeopardize the safety and reliability of utility and CII operations. Hence, utilities are concerned about using commercial communications networks due to reliability concerns, and need assurances that broadband commercial services can provide reliable communications, even during emergencies.

Smart grid applications include a wide range of applications from meter reading to demand response and distribution automation, each with their own functional requirements that may or may not be supported by broadband Internet service providers. Because smart grid encompasses such a wide range of applications, utilities need to have regulatory clarity that specialized services that support those applications won't be subject to Open Internet rules that could undermine the reliability of those specialized services, and by extension, the smart grid applications they support. Conversely, utilities will

be discouraged from using such specialized services if there is uncertainty that they could be subject to Open Internet rules. This cannot be left to chance; instead utilities need to know which specialized services would be subject to restrictions and which wouldn't. That way, utilities may decide whether they can use specialized services for certain smart grid applications, depending on their criticality. In that regard, certain smart grid applications that are less mission critical, such as meter reading, may be able to be supported by broadband Internet services, while other smart grid applications that are clearly mission critical, such as distribution automation, may not be able to be supported by broadband Internet services, depending on the extent to which they are subject to the Open Internet rules.

I. **The Commission Should Clarify Its Position on Specialized Services**.

UTC agrees with Southern Company Services, Inc. ("Southern") that the Commission intended to provide a general exception for specialized services, and that the Commission included smart grid among examples of specialized services that may require or benefit from enhanced quality of service rather than traditional best-effort Internet delivery.[2] UTC disagrees with Public Knowledge, which claims that the Commission only provided limited exceptions for specialized services, including cable TV service and voice services that are prioritized on broadband Internet provider networks.[3]

Contrary to Public Knowledge, a narrow exception would unnecessarily restrict broadband Internet service providers without providing any commensurate benefit to the public. Moreover, the underlying purpose of the Open Internet service rules would not be served by their application to specialized services for smart grid. As the Commission recognized, it can review certain specialized services on a case-by-case basis to ensure that they are not being implemented in an anticompetitive manner. Taking the prophylactic approach that Public Knowledge wants would require endless Commission review of every single specialized service by every single broadband Internet service provider before an exception could be applied. Instead, the Commission should provide blanket

[2] Petition at 2-3.

[3] Opposition of Public Knowledge and Future of Music Coalition to Petition for Clarification or Reconsideration in GN Docket No. 09-191 and WC Docket No. 07-52 at 2-3 (filed Dec. 16, 2011).

regulatory certainty that the Open Internet rules do not apply to specialized services for smart grid generally, rather than require *a priori* review of such specialized services. In the unlikely event that there is any anticompetitive conduct by broadband providers in its provision of such specialized services, the Commission could intervene at that point – it doesn't need to intervene at the outset against speculative concerns, as Public Knowledge claims it should.

The Commission does not need to apply the Open Internet rules here in order to protect mass market Internet services, quite the opposite. As Southern explains, fear of violating the Open Internet rules "could have a chilling effect on broadband providers' willingness to develop specialized services, either with existing capacity or through expanded capacity."[4] Moreover, prioritizing smart grid traffic does not discriminate against other traffic on the network. It's merely a form of network management, which is permitted under the FCC's Open Internet rules. As such, the Commission should clarify that the Open Internet rules do not apply to specialized services for smart grid, which will remove regulatory uncertainty and promote the public interest in maintaining the safe, efficient and reliable delivery of essential electric services to the public at large.[5]

Utilities and other critical infrastructure industries need reliable communications to support smart grid and other mission critical applications, such as voice services and emergency response communications. The Commission has recognized this. As part of the National Broadband Plan, the Commission recommended that it should start a proceeding to explore the reliability and resiliency of commercial broadband communications networks, recognizing that "commercial broadband networks, and wireless broadband networks in particular, can serve more mission-critical and wide-area utility communications needs as service providers adopt measures to improve the reliability and resiliency of

[4] Petition at 6.

[5] UTC urges the Commission to clarify that the Open Internet rules do not apply to specialized services for other mission critical applications (in addition to smart grid) by utilities and other critical infrastructure industries, including water and gas utilities as well as pipeline companies.

these networks during emergency scenarios."[6] Subsequent to the National Broadband Plan, the Department of Energy confirmed the need for reliable communications for smart grid. "[O]ne of the most significant benefits of Smart Grid technologies is to increase the reliability of the electric power grid. As a result, and quite understandably, in selecting among alternatives for the Smart Grid communications needs, utilities do not want to introduce any elements that could potentially compromise reliability."[7]

One of the key issues for communications reliability for utilities is priority of service. As DOE reported, utilities near universally commented that they were reluctant to use commercial services for Smart Grid communications applications because of "the need – particularly during an emergency – to have priority access over consumers."[8] During an emergency, commercial service networks are subject to congestion, which can delay the time it takes for calls to go through or can preclude calls from going through at all. Thus, utility communications could be slow or unavailable during emergencies – when utilities need communications the most – if commercial providers can't prioritize traffic because of the Open Internet rules. But even during routine periods, there are certain applications that require extremely low latency in the order of milliseconds. For example, teleprotection systems that utilities use to prevent faults on the grid from cascading must be able to isolate the fault within 20 milliseconds or less.[9] If a commercial service provider cannot meet these latency requirements due to Open Internet restrictions, utilities cannot afford to compromise the integrity of the grid and will not use commercial services for those mission-critical applications.

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[6] National Broadband Plan at Recommendation 12.1, (visited at http://www.broadband.gov/plan/12-energy-and-the-environment/#r12-1).

[7] Department of Energy, *Communications Requirements of Smart Grid Technologies*, at 43 (visited at http://energy.gov/sites/prod/files/gcprod/documents/Smart_Grid_Communications_Requirements_Report_10-05-2010.pdf)

[8] *Id.* at 47.

[9] These systems were widely credited for limiting the extent of the August 2003 blackout to the Northeast.

Conclusion

Therefore, the Commission should clarify that specialized services for smart grid and other critical infrastructure communications applications are not subject to the FCC's Open Internet rules. UTC agrees with Southern that utilities "must have assurance that they can contract for quality of service that exceeds the best-efforts standard for broadband Internet access service." Clarification of this issue would provide regulatory certainty, thus enabling utilities to consider using commercial broadband Internet service providers to support their communications needs, including smart grid. UTC looks forward to working with Commission on this issue going forward.

Respectfully submitted,

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